Tri-Agency Mission Scientist Discussion Summary - July 27, 2010
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The project is still within a suppressed period with no organized tropical systems likely to emerge in the next 2-3 days. Two tropical waves and one surface trough are being monitored including 19L which is approaching the western Antilles in a dry stable layer that is inhibiting convection (with some convection being pulled in from the ITCZ) and 20L a tilted tropical wave in the area 18-10 N, 34-28 W which has cyclonic flow and in a region of high precipitable water but with not much convection noted. There is also another wave that is preparing to leave Africa which will have to be monitored in subsequent briefings. A dry Saharan layer was noted in both the Caribbean and central Atlantic Ocean. There was some debate on the role of the SAL versus subsidence and deformation in suppressing the convective activity in the Atlantic.

Much of the planning discussion focused on the possibility of today's potential cloud microphysics flight. In the morning before the weather briefing, some convective activity was noted in the vicinity of 26 N/90W, approximately a 1.25 hour ferry from Fort Lauderdale. At that time, the decision was made by the GRIP mission scientists to continue preparations for a 5-hour cloud microphysics mission. However, at the time of the daily weather briefing, the convective activity was further west (within the vicinity of the Lake Charles radar) and tracking toward the shore, meaning a further ferry flight and hence it was decided that the activity was too far away from Fort Lauderdale to be a candidate for a microphysics mission. Thus, the decision was made to abort the mission approximately 1-hour before the planned take-off. Assuming that the DC-8 would have already fueled for a 5-hour mission, we need to check whether we would have been allowed to abort the flight at this time. There was also some convective activity off the east coast of the U.S. However, given its distance from Fort Lauderdale and the high probability that it would not persist as it approached a high pressure region, it was also not regarded as a suitable candidate for today's planned cloud microphysics flight.

For tomorrow, there were no targets of interest. Further, there does not appear to be an opportunity tomorrow for a cloud microphysics flight within an acceptably close distance to Fort Lauderdale, or a good candidate for a Calipso/Cloudsat overpass. Thus, the decision was made to have a no-fly day for all aircraft. Some discussion centered around whether cloud microphysics flights needed to be within the range or ground radars. Although such a condition was identified as desirable, it was not identified as a necessary condition.

Following is the consensus decision on all aircraft for July 28 mission:

G-V: No flights planned.

NOAA 42 and 43, G-IV: No flights planned.

NASA GH, DC-8 and WB-57: No flights planned.